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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,923	12/19/2000	Rajeev Krishnamurthi	QCPA509C	4873

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EXAMINER

ZEWDU, MELESS NMN

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/739,923

Applicant(s)

KRISHNAMURTHI ET AL.

Examiner

Meless N Zewdu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment (B)

1. This action is in response to the communication filed on 2/6/04.
2. Claims 2-35 are pending in this action.

Claim Rejections - 35 USC § 112

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "mobile station controller" in claims 2, 3, 11, 19, 20 and 28 is used by the claim to mean "mobile station controller", while the accepted meaning is "mobile switching center." The term is indefinite because the specification does not clearly redefine the term. For examination purpose, examiner, following the drawings, interprets the "mobile station controller" as the ---mobile switching center ---.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "mobile station controller" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 7, 11-14, 19, 20, 24 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spartz et al.), (Spartz) (US 6,178,337 B1) in view of Bilgic et al. (Bilgic) (US 5,884,148).

As per claim 2: In a communication system, a method comprising:

 sending a base station Service Request from a base station to a mobile switching center for establishing a mobile-termination and base station reads on '337 (see col. 3, lines 50-62; col. 4, lines 39-45; col. 17,

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lines 60-65; col. 23, lines 20-54). Providing resource for call connection is service. But, Spartz does not explicitly teach about a base station initiated call setup request message to a mobile switching center to which the mobile switching center, in return, sends to the base station a service response message for acknowledging the call setup request initiated by the base station, as claimed by applicant. However, in a related field of endeavor Bilgic teaches that a base station is capable of analyzing a received call from a subscriber station and based on the analysis, initiates a call setup request message (col. 2, lines 61-65) to a base station controller/MSC (see col. 12, lines 49-57) to which, the BSC, in turn sends a Service Response message to the base station (see col. 12, lines 23-25; also see fig. 1; claims 5, 13, 16, 26, and 28). It is evident in fig. 1 that even though the dialed telephone number comes from wired devices, the connection with the base station is carried out via the URC wirelessly. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Spartz with that of Bilgic for the advantage of providing the flexibility and mobility afforded by a wireless service to an end user of a standard non-wireless device (see col. 2, lines 29-37).

As per claim 3: The method further comprising:

 sending a Paging Request message from said mobile switching center to said base station for establishing said mobile-termination and base station initiated call reads on '337 (see col. 17, line 35-col. 18, line 14; particularly col. 17, lines 35-40). The BSC responds by having the subscriber unit and the base station establish the call setup by generating a set of signaling messages. The signaling messages, in this context, have a paging signal function.

As per claim 7: The method wherein said base station Service Request contains an identity of a mobile station, wherein said mobile-termination and base station-initiated call is for said mobile station reads on '337 (see col. 7, lines 36-60, particularly lines 43-50). The prior art's channel access system includes user identification.

As per claim 11: The method further comprising:

 determining said mobile-termination and base station-initiated call is for a mobile station within a serving region of said mobile switching center reads on '337 (see col. 14, lines 15-23). As modified above, the base station of the prior art would be able to initiate call setup message and the

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switching center would not be providing service unless a subscriber is within its jurisdiction/service region, as determined from received user's identification (see claim 7).

As per claim 12: The method further comprising:

 sending a page message from said base station to a mobile station over a paging channel, wherein said mobile station is a terminated mobile station reads on '337 (see col. 14, lines 15-23). When modified as shown above, the page signal/message could be a mobile-termination and base station-initiated call.

As per claim 13: The method further comprising:

 sending a page response message from said mobile station to said base station over an access channel acknowledging reception of said page message from said base station reads on '337 (see col. 25, lines 1-34).

As per claim 14: The method further comprising:

 establishing said mobile-termination and base station-initiated call between said mobile station and said base station reads on '337 (see figs. 2 and 3; col. 14, lines 15-23). As modified above, a base station would have been able to initiate a call.

As per claim 19: In a communication system, an apparatus comprising:

a base station configured for sending a base station Service Request for establishing a mobile-termination reads on station '337 (see col. 3, lines 50-62; col. 4, lines 39-45; col. 17, lines 60-65; col. 23, lines 20-54).

a mobile switching center configured for receiving said base station Service Request reads on '337 (see col. 17, line 65-col. 18, line 9). But, Spartz does not explicitly teach about a base station initiated call setup request message to a mobile switching center to which the mobile switching center, in return, sends to the base station a service response message for acknowledging the call setup request initiated by the base station, as claimed by applicant. However, in a related field of endeavor Bilgic teaches that a base station is capable of analyzing a received call from a subscriber station and based on the analysis, initiates a call setup request message (col. 2, lines 61-65) to a base station controller/MSC (see col. 12, lines 49-57) to which, the BSC, in turn sends a Service Response message to the base station (see col. 12, lines 23-25; also see fig. 1; claims 5, 13, 16, 26, and 28). It is evident in fig. 1 that even though the dialed telephone number comes from wired devices, the connection with the base station is carried out via the URC wirelessly. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Spartz with that

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of Bilgic for the advantage of providing the flexibility and mobility afforded by a wireless service to an end user of a standard non-wireless device (see col. 2, lines 29-37).

As per claim 20: The apparatus wherein said mobile switching center is configured for sending a Paging Request message to said base station for establishing said mobile-termination and base station-initiated call reads on '337 (see col. 17, line 35-col. 18, line 14; particularly col. 17, lines 35-40). The BSC responds by having the subscriber unit and the base station establish the call setup by generating a set of signaling messages. The signaling messages, in this context, have a paging signal function.

As per claim 24: the apparatus:

wherein said base station Service Request contains an identity of a mobile station, wherein said mobile-termination and base station-initiated call is for said mobile station reads on '337 (see col. 7, lines 36-60, particularly lines 43-50). The prior art's channel access system includes user identification.

As per claim 28: The apparatus:

wherein said mobile station controller is configured for determining said mobile-termination and base station-initiated call is for a mobile station within a serving region of said mobile station controller reads on '337 (see col. 7, lines 36-60; col. 14, lines 15-23). As modified above, the base

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station would be able to initiate a call setup and the mobile switching center would be able to provide service only those subscribers under its jurisdiction.

As per claim 29: The apparatus:

wherein said base station is configured for sending a page message to a mobile station over a paging channel, wherein said mobile station is a terminated mobile station for said mobile-termination and base station-initiated call reads on '337 (see col. 14, lines 15-23). When modified as shown above, the page signal/message could be a mobile-termination and base station-initiated call.

As per claim 30: The apparatus wherein said mobile station is configured for sending a page response message to said base station over an access channel acknowledging reception of said page message from said base station reads on '337 (see col. 25, lines 1-34).

As per claim 31: The apparatus wherein said mobile station and said base station, individually or in combination, are configured for establishing said mobile-termination and base station-initiated call between said mobile station and said base station reads on '337 (see figs. 2 and 3; col. 14, lines

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15-23). As modified above, a base station would have been able to initiate a call.

Claim 4-6, 15-18, 21-23 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spartz in view of Bilgic applied to claims 2 and 19 above, and further in view of Manning et al. (Manning) (US 6,519,266).

As per claim 4: The method further comprising:

wherein said mobile-termination and base station-initiated call is for said mobile station reads on '337 (see col. 17, line 47-col. 18, line 14).

According to the combination shown in the rejections of claims 2 and 19, a base station would be able to initiate call for any device having URC, which will enable the device become mobile. But, Spartz in view of Bilgic do not explicitly teach about establishing a Dormant state between a mobile station and said base station prior to said sending said base station Service Response message, as claimed by applicant. However, in a related field of endeavor, Manning teaches that a dormant state can be established between a mobile station and a network (see col. 2, line 65-col. 4, line 26, particularly col. 3, line 39-col. 4, line 26). It is obvious that a base station would have been part of the network. Therefore, it would have been

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obvious for one of ordinary skill in the art at the time the invention was made to further modify the above reference/s with the teaching of Manning for the advantage of enabling mobile stations to be in a dormant state when there is not data to transmit/send and in an active state when there is data to send/transmit (see col. 3, line 57-col. 4, line 16).

As per claim 5: The method further comprising:

terminating all physical channels between said base station and said mobile station for said establishing said Dormant state reads on reads on '266 (see col. 3, lines 57-64; col. 4, lines 9-16).

As per claim 6: But, The method further comprising:

maintaining a Point to Point Protocol between said mobile station and a Packet Data Network during said Dormant state reads on '266 (see col. 3, line 38-col. 4, line 26).

As per claim 15: The method further comprising:

receiving at said base station a request from a Packet Data Network for establishing a packet data communication call with a mobile station reads on '266 (see col. 3, line 38-col. 4, line 26).

As per claim 16: The method further comprising:

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detecting a Dormant state between said mobile station and said base station reads on '266 (see col. 4, lines 9-16). Time is provided as means/detector for putting the mobile on a dormant state.

As per claim 17: The method further comprising:

receiving at said base station at least a packet of data for transmission from a Packet Data Network to a mobile station reads on '266 (see col. 3, line 39-col. 4, line 16).

As per claim 18: The method further comprising:

detecting a Dormant state between said mobile station and said base station '266 (see col. 4, lines 9-16). Time is provided as means/detector for putting the mobile on a dormant state.

As per claim 21: The apparatus wherein said base station is configured for establishing a Dormant state between a mobile station and said base station prior to said sending said base station Service Response message, wherein said mobile-termination and base station-initiated call is for said mobile station reads on '266 (see col. 2, line 65-col. 4, line 26, particularly col. 3, line 39-col. 4, line 26)

As per claim 22: The apparatus wherein said base station is configured for terminating all physical channels between said base station and said

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mobile station for said establishing said Dormant state reads on '266 (see col. 3, lines 57-64; col. 4, lines 9-16).

As per claim 23: The apparatus wherein said mobile station, or said base station, or said mobile station and said base station are configured for maintaining a Point to Point Protocol between said mobile station and a packet Data Network during said Dormant state '266 (see col. 3, line 38-col. 4, line 26).

As per claim 32: The apparatus wherein said base station is configured for receiving a request from a Packet Data Network for establishing a packet data communication call with a mobile station reads on '266 (see col. 3, line 38-col. 4, line 26).

As per claim 33: The apparatus wherein said base station is configured for detecting a Dormant state between said mobile station and said base station reads on '266 (see col. 4, lines 9-16). Time is provided as means/detector for putting the mobile on a dormant state.

As per claim 34: The apparatus as recited in claim 19 wherein said base station is configured for receiving at least a packet of data for transmission from a Packet Data Network to a mobile station reads on **'266 (see col. 3, line 38-col. 4, line 26).**

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As per claim 35: The apparatus wherein said base station is configured for detecting a Dormant state between said mobile station and said base station reads on '266 (see col. 4, lines 9-16). Time is provided as means/detector for putting the mobile on a dormant state.

Claims 8-10 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spartz in views of Bilgic, as applied to claims 2 and 19 and further in view of McWilliams (US 6,272,547B1)

As per claim 8: But, Spartz in view of Gennel do not explicitly teach about starting a timer for counting an elapsed time from said sending said base station Service Request, as claimed by applicant. However, in a related field of endeavor, McWillimas teaches about a message sending and receiving computers using a message service for transferring a small amount of data files controlled by the initiating computer wherein the initiator sends a request message to the responder and at the same time it starts a timer (see col. 7, lines 26-36). Here, one skilled in the art would realize that the question is not fitting a timer into a device that requires one. The key question is the teaching of measuring time in association with electronic message (wireless or could be wired) to measure the time/delay. It is also to be noted that a base station and a base station controller

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includes computers that communicate each other using messaging data.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify Spartz in view of Bilgic with the teaching of McWillimas for the advantage of reliably transferring/sending data/messages from one entity/computer to another (see col. 1, lines 18-22).

As per claim 9: The method further comprising:

re-sending said base station Service Request when said elapsed time exceeds a predetermined elapsed time reads on '547 (see col. 7, lines 26-36).

As per claim 10: The method further comprising:

stopping said timer when said base station Service Response message is received by said base station reads on '547 (see col. 7, lines 26-36). The timer in the instant reference stops/restarts, when the set time is reached. It is obvious that the same timer would stop upon detecting a response from a responding device. If not, the sender would not know whether or not the message is received and the timer would keep repeating because it is not detecting a response that would stop it.

As per claim 25: The apparatus further comprising:

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a timer for counting an elapsed time from said sending said base station Service Request reads on '547 (see col. 7, lines 26-36). The feature of claim 25 is similar to the feature of claim 8 and hence rejected on the same ground and motivation. Please refer to claim 8 for motivation.

As per claim 26: The apparatus wherein said base station is configured for re-sending said base station Service Request when said elapsed time exceeds a predetermined elapsed time time reads on '547 (see col. 7, lines 26-36).

As per claim 27: The apparatus as recited in claim 25 wherein said timer is configured for stopping when said base station Service Response message is received by said base station '547 (see col. 7, lines 26-36). The timer in the instant reference stops/restarts, when the set time is reached. It is obvious that the same timer would stop upon detecting a response from a responding device. If not, the sender would not know whether or not the message is received and the timer would keep repeating because it is not detecting a response that would stop it.

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Response to Arguments

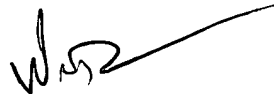
Applicant's arguments with respect to claims 2-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N Zewdu whose telephone number is (703) 306-5418. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Meless Zewdu

Examiner

09 April 2004.